

IN THE CLAIMS:

Please amend the claims as follows:

1. (currently amended) An apparatus for receiving, storing, and dispensing an elongate material, the apparatus comprising:

a tubular member having a generally cylindrical shape defined by a length in an axial direction and a radius in a radial direction, the tubular member having a first end and a second end; and

a first flange proximate the first end of the tubular member and comprising

a core ~~portion~~, portion extending in the radial direction from an arbor aperture to proximate the first end of the tubular member,

an outer portion extending in the radial direction away from the core portion to an outer edge, and

the core portion comprising a plurality of elongated corrugations substantially rectangular in cross section and extending in the radial direction, the plurality of corrugations being formed by a plurality of web portions, each web portion of the plurality of web portions being offset in the axial direction from and dimensionally of the same order of magnitude as adjacent web portions.

2. (previously presented) The apparatus of claim 1, wherein the plurality of corrugations is further formed by a plurality of connecting walls, each connecting wall of the plurality of connecting walls extending between two adjacent web portions of the plurality of web portions.

3. (previously presented) The apparatus of claim 1, wherein the first flange further comprises a closure secured to the core portion to stiffen the first flange by creating a closed cross-section in the plurality of corrugations of the core portion.

4. (previously presented) The apparatus of claim 1, further comprising a second flange proximate the second end of the tubular member, the tubular member secured to the first and second flanges to support an axial tensile force therebetween.

5. (original) The apparatus of claim 1, wherein the outer portion is substantially flat.

6. (original) The apparatus of claim 5, wherein the outer edge further comprises a raised rim.

7. (previously presented) The apparatus of claim 1, wherein the outer portion further comprises ribs to stiffen the outer portion.

8. (previously presented) The apparatus of claim 1, wherein the web portions have a common thickness that is substantially constant.

9. (original) The apparatus of claim 1, wherein the outer portion is corrugated.

10. (currently amended) An apparatus for receiving, storing, and dispensing an elongate material, the apparatus comprising:

a tubular member having a generally cylindrical shape defined by a length in an axial direction and a radius in a radial direction to receive an elongate material wrapped therearound;

a first flange proximate the tubular member and comprising

an arbor wall defining an arbor aperture, and

an outer portion extending in the radial direction from the arbor wall to an outer edge to restrain the elongate material in the axial direction; and

~~the first flange~~ wherein the outer portion comprises a plurality of corrugations of substantially rectangular cross section in which each corrugation thereof extends from substantially the arbor wall to substantially the outer edge and each of the corrugations is dimensionally of the same order of magnitude.

11. (previously presented) The apparatus of claim 10, further comprising a second flange, wherein the tubular member is secured to the first and second flanges to support an axial tensile force therebetween.

12. (previously presented) The apparatus of claim 10, wherein the first flange further comprises a closure secured to the outer portion to stiffen the first flange by creating a closed cross-section in substantially each corrugation of the plurality of corrugations.

13. (previously presented) The apparatus of claim 10, wherein the plurality of corrugations of the outer portion further comprises webs, alternatingly offset from one another in the axial direction, and connector walls extending between adjacent webs.

14-15. (cancelled)

16. (currently amended) An apparatus for receiving, storing, and dispensing an elongate material, the apparatus comprising:

a tubular member defining axial, radial, and circumferential directions and shaped to receive an elongate material wrapped therearound;

a first flange proximate the tubular member and comprising an arbor wall defining the perimeter of a centrally located arbor aperture and an outer portion surrounding the arbor wall and extending away therefrom in the radial direction to an outer edge, the outer portion providing a restraint to the elongate material in the axial direction; and

the outer portion formed as a plurality of corrugations of substantially rectangular cross section in which each corrugation terminates substantially at the arbor wall and extends therefrom to substantially the outer edge and each of the corrugations is dimensionally of the same order of magnitude.

17. (original) The apparatus of claim 16, wherein the tubular member is secured to the first flange to support a tensile force in the axial direction therebetween.

18. (previously presented) The apparatus of claim 17, where the plurality of corrugations comprise a plurality of web portions arranged to be discontinuous in the circumferential direction and to extend away from the arbor wall in the radial direction, each web portion of the plurality of web portions being offset in the axial direction from adjacent web portions.

19. (original) The apparatus of claim 18, wherein the plurality of corrugations comprise a plurality of connecting walls, each connecting wall of the plurality of connecting walls extending between two adjacent web portions of the plurality of web portions.

20. (original) The apparatus of claim 19, wherein each corrugation of the plurality of corrugations directly contacts the arbor wall and extends away therefrom to substantially the outer edge.

21. (previously presented) The apparatus of claim 16, wherein each corrugation directly contacts the arbor wall.

22. (previously presented) The apparatus of claim 16, wherein each corrugation terminates proximate a rib extending substantially to the arbor wall.

23. (currently amended) An apparatus for containing an elongate material wrapped therearound, the apparatus having axial, radial, and circumferential directions and comprising:

a tube to receive and dispense an elongate material wrapped in the circumferential direction therearound, the tube having a first end and a second end;

a first flange having an inner radius forming an arbor engagement portion to rotate the apparatus thereabout, an outer radius defining an outer edge spaced in the radial direction from the arbor engagement portion, and a core radius defining a region of the first flange to contact the first end of the tube; and

the first flange; flange further comprising corrugations extending radially from proximate the core radius to proximate the outer radius and having substantially rectangular cross sections, respectively, the corrugations comprising a plurality of webs, each web of the plurality of webs being offset axially from and dimensionally of the same order of magnitude as adjacent webs of the plurality of webs, and a plurality of connecting walls, each connecting wall of the plurality of connecting walls extending between two adjacent webs of the plurality of webs, the connecting walls having a width in the axial direction of substantially uniform dimension from substantially the core radius to the outer radius.

24. (previously presented) The apparatus of claim 23, wherein the first flange is formed to have a uniform axial thickness from substantially the core radius to the outer radius.

25. (cancelled)

26. (currently amended) The apparatus of claim ~~25~~ 23, wherein one half of the plurality of webs is inner webs and the other half of the plurality of webs is outer webs.

27. (previously presented) The apparatus of claim 26, wherein the inner webs and outer webs are alternately positioned around the first flange.

28. (previously presented) The apparatus of claim 27, wherein the inner and outer webs are substantially planar and extend in the radial and circumferential directions.

29. (previously presented) The apparatus of claim 28, wherein the inner webs are substantially greater in area than the outer webs.

30. (previously presented) The apparatus of claim 29, wherein the outer webs have a substantially constant width in the circumferential direction along a path in the radial direction.

31. (previously presented) The apparatus of claim 30, wherein the inner webs have a width in the circumferential direction that varies at a constant rate along a path in the radial direction.

32. (previously presented) The apparatus of claim 23, wherein the first flange is formed as a homogeneous material.



33. (previously presented) The apparatus of claim 32, wherein the first flange is formed of a polymer.

34. (previously presented) The apparatus of claim 33, wherein the first flange is formed of an olefinic polymer.

35. (previously presented) The apparatus of claim 34, wherein the first flange is homogeneously and monolithically molded of polyethylene.

36. (previously presented) The apparatus of claim 23, wherein the arbor engagement portion is an arbor aperture.

37. (previously presented) The apparatus of claim 23, further comprising a second flange positioned proximate the second end of the tube.

38. (currently amended) An apparatus for containing an elongate material wrapped therearound, the apparatus having axial, radial, and circumferential directions and comprising:

a tube to receive and dispense an elongate material wrapped in the circumferential direction therearound, the tube having a first end and a second end;

a first flange having an inner radius forming an arbor engagement portion to rotate the apparatus thereabout, an outer radius defining an outer edge spaced in the radial direction from the arbor engagement portion, and a core radius defining a region of the first flange to contact the first end of the tube; and

the first flange; flange further comprising corrugations substantially rectangular in radial cross section and extending radially from proximate the core radius to proximate the outer radius, the corrugations comprising a plurality of webs, each web of the plurality of webs being offset axially from and dimensionally of the same order of magnitude as adjacent webs of the plurality of webs, and a plurality of connecting walls, each connecting wall of the plurality of connecting walls extending between two adjacent webs of the plurality of webs, the connecting walls and webs being molded of a homogeneous material.